Net-based Biodiversity Resources

Internet and World Wide Web allowed new opportunities for interchange of data.

Distributed projects before 2000

Environmental Resources Information Network (ERIN) used distributed data for modeling on Internet in 1994, but few successful electronic data interchange projects used internet until late 1990s.

Distributed projects since 2000

- Red Mundial de Información sobre Biodiversidad (REMIB)
- The World Network on Biodiversity
- Australian Virtual Herbarium
- speciesLink,
- European Natural History Specimen Information Network (ENHSIN)
- Biological Collection Access Service for Europe
- GBIF Portal (GBIF)
- Mammal Networked Information System (MaNIS)
- Encyclopedia of Life
- Animal Diversity Web

On-line Schema and Protocols

- Darwin Core Schema along with the DiGIR protocol (SourceForge 2004)
- Combined BioCASE protocol (BioCASE) and ABCD (Access to Biological Collections Data) schema are fitted for interchange of primary species information.
- More recently the Taxonomic Databases Working Group (TDWG) have begun working to develop a new combined protocol (TAPIR -http://ww3.bgbm.org/tapir)
- Middle path between simplicity of DiGIR and complexity of BioCASE.

Global Biodiversity Informatics Facility (GBIF): establish a global network of interoperable databases with primary biodiversity data.

These data include:

- Information associated with specimens in collections
- Records of plants and animals in nature
- Taxonomy and metadata from institutions and projects
- Descriptions of data holdings



free and open access to biodiversity data

GLOBAL BIODIVERSITY INFORMATION FACILITY



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Directory of Contacts

This section contains GBIF's communication platforms, printed and online resources, key strategic documents, the GBIF newsletter and links to GBIF posters.



GBIF

- Secretariat, Participants and Nodes
- Not a physical infrastructure, but distributed across the internet
- Collective contributions of thousands of scientists in hundreds of institutes in tens of countries around the world.
- Serves many different user communities.

Node

in charge of deploying informatics infrastructure, building capacity, promoting policies on open access to biodiversity data, supporting data holders in the process of mobilizing and publishing data, and coordinating the development of information products and services for target audiences.



- NSF supported 17 North American institutions developed the <u>Mammal Networked Information</u> <u>System</u>.
- Objectives of MaNIS were to
 - 1) facilitate open access to combined specimen data from a web browser,
 - 2) enhance the value of specimen collections,
 - 3) conserve curatorial resources,
 - 4) use a design paradigm that can be easily adopted by other disciplines with similar needs.

Encyclopedia of Life

News (510) Popular V



Explore





Raiamas guttatus (Day, 1870) Burmese trout



<u>Melaloncha lacerna Brown,</u> 2006



Acipenser oxyrinchus desotoi Vladykov, 1955 Gulf sturgeon

Dichotomius mamillatus FELSCHE, 1901

more species

Ш

<u>Canthidium atomarium</u> Balthasar 1939

EOL Announcements

- Listen and subscribe to the <u>One</u> <u>Species at a Time</u> podcast.
- Explore EOL species pages recently highlighted on the <u>National Museum</u> of Natural History website.
- Follow us on Twitter at <u>http://twitter.com/EOL</u>.
- For more information on becoming a curator or contributor, see how to <u>help us build EOL</u>.
- Visit our <u>Gulf of Mexico Oil Spill 2010</u> resource page for information about species affected by the Deepwater Horizon Incident.
- Learn about the <u>EOL Fellows Program</u>.

Featured



Alexandrium fundyense Balech

What's New?

- I1/19/2010 -Create your own Antarctic Field Guide!
- 11/18/2010 -

Congratulations to our friends (and partners) at <u>Atlas</u> of Living Australia on your public launch!

- 11/18/2010 -Life found in deep layer of Earth's crust
- I1/17/2010 -Scottish Wildcat Podcast
- 11/09/2010 -The world's best underwater photographs 2010
- more news...





Submit an image Description Submit text More information on how to help 0 SOURCE AND ADDITIONAL INFORMATION Latest Changes SUPPLIER Smithsonian's North American Mammals 🗗 EXPLORE **RIGHTS HOLDER Smithsonian Institution** LICENSE Some rights reserved 12 (cc) BY Atypichthys latus SOURCE URL View original data object 12 McCulloch & Waite, 1916 INDEXED April 08, 2010 Eastern footballer Lithodesmium undulatum

Mainly nocturnal and rarely seen, the Cinereus Shrew is nonetheless common and widespread below the timberline in northern deciduous and coniferous forests, in both wet and dry habitats. It is also known as the Masked Shrew and the Common Shrew. Litter size ranges from 4-10, averaging 7. The newborns are about 15-17 mm long and are hairless, with fused eyelids. Their eyes open after 17 or 18 days, and they are weaned at approximately 20 days. The Cinereus Shrew is not distinctly marked. The back is brown, the underside is grayish white, and the tail has a blackish tip.

Links:

Mammal Species of the World

REFERENCES



Ehrenberg <u>Omophron grossum</u> <u>Casey</u> <u>Telmatactis cricoides</u> (Duchassaing, 1850) Blunt-tentacled anemone



Potentilla robbinsiana Oakes ex Torr. & A.Gray Dwarf mountain cinquefoil

"Sorex cinereus Kerr, 1792". Encyclopedia of Life, available from "http://www.eol.org/pages/115784". Accessed 22 Nov 2010.



Learning + Education Encyclopedia of Life

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Get Started

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To find activities that you can try with your students right now, visit the following pages.

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Find classroom activities related to classification and make connections to EOL species pages.

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Try anywhere species inventory activities. Take a look around and see what you find!

Interactives and Games

Visit the virtual Whyreef and learn about reef species with information from EOL, take the Google Species Quiz, and learn about our educational species pages for Mammoths and Mastadons.

How to start participating on EOL species pages

You're just a few moments away from contributing to EOL! This QuickStart page walks you through the simple steps it takes to join the thousands of other people all over the world helping to build the Encyclopedia of Life.

Register (free and easy)

First you'll need to register. Anyone can browse EOL, but to add content you need to be logged in. Creating an account is simple, and if you have an OpenID, even simpler. All the details are here.

Visit an EOL species page

Elliott Bennett

Martha's Vineyard Regional High Scho Oaks Bluff, Massachusetts, USA



Elliott Bennett read about the EOL in h morning newspaper and was intrigued by the idea of an Encyclopedia of Life. She emailed EOL and after some discussion about a possible project th might help build EOL, Bennett and her students set about creating an inventory of the plant species on the island of Martha's Vineyard.

Ms. Bennett has also developed resources to help her students becom familiar with EOL:

Getting to know the Enyclopedia of Life

Classification Activity



Learning + Education

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Scottish Wildcat

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